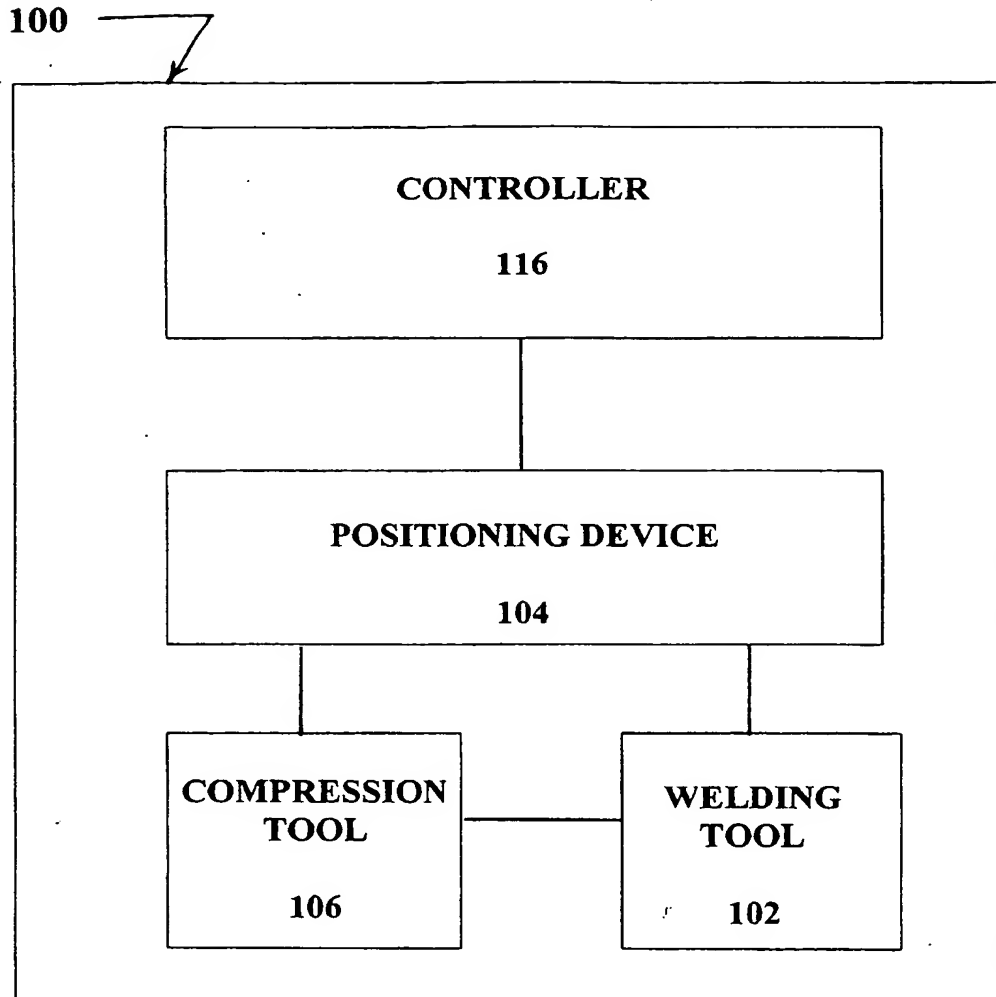


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FIG. 1



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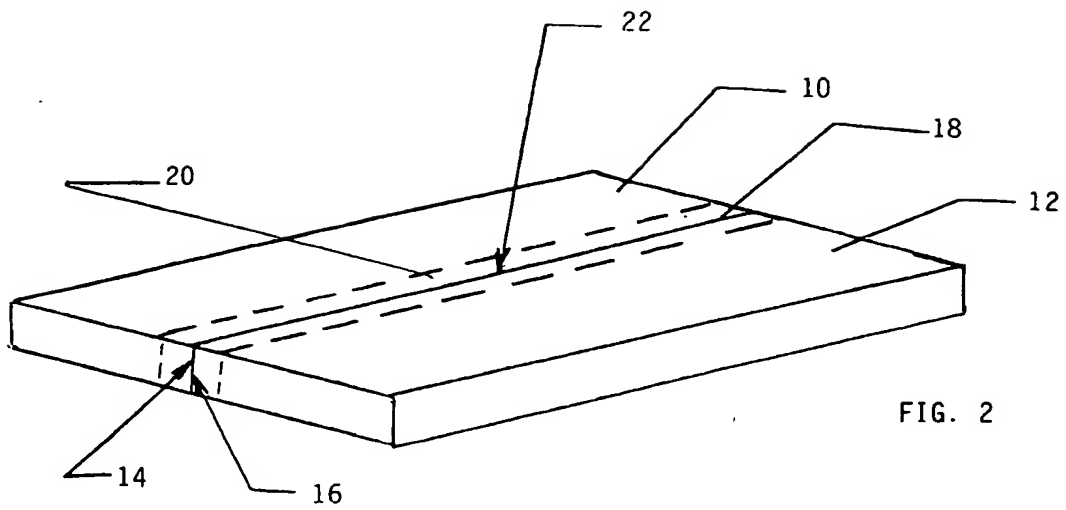


FIG. 2

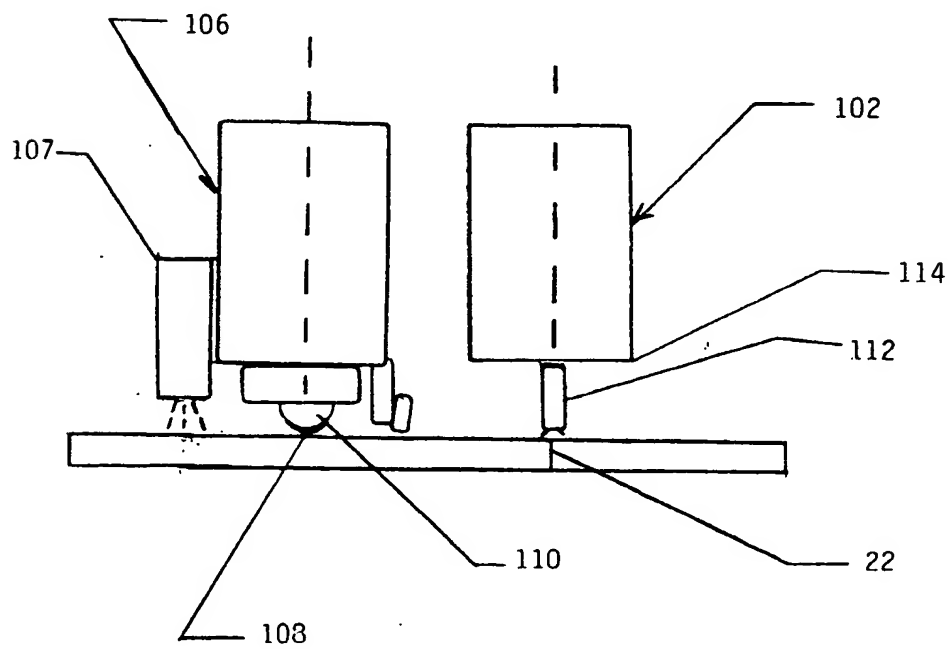
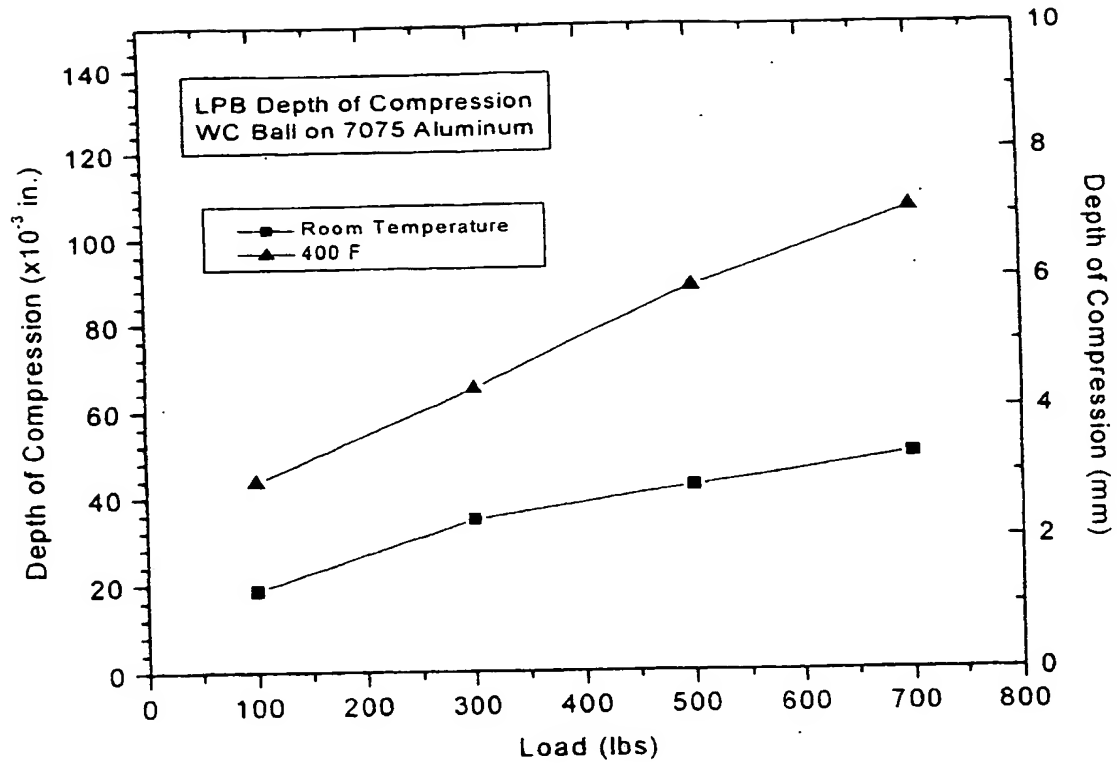


FIG. 3

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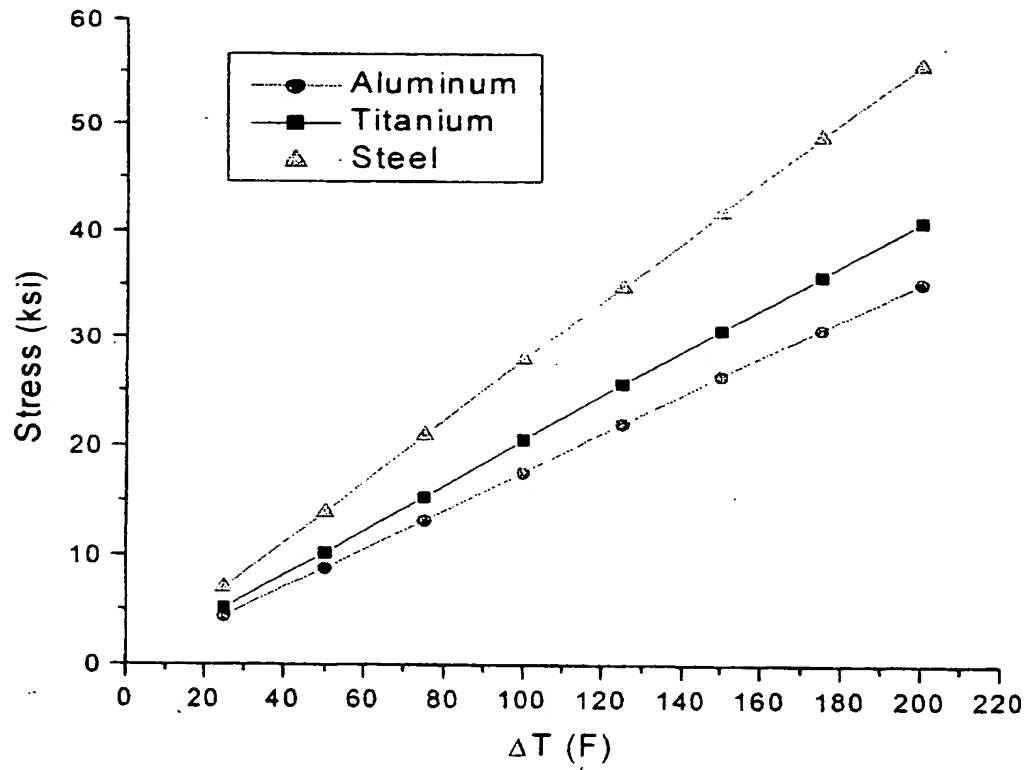
FIG. 4



Depth of compression achieved with increasing load in spherical ball burnishing using a 0.75 in. ball at room and elevated temperature of 400F.

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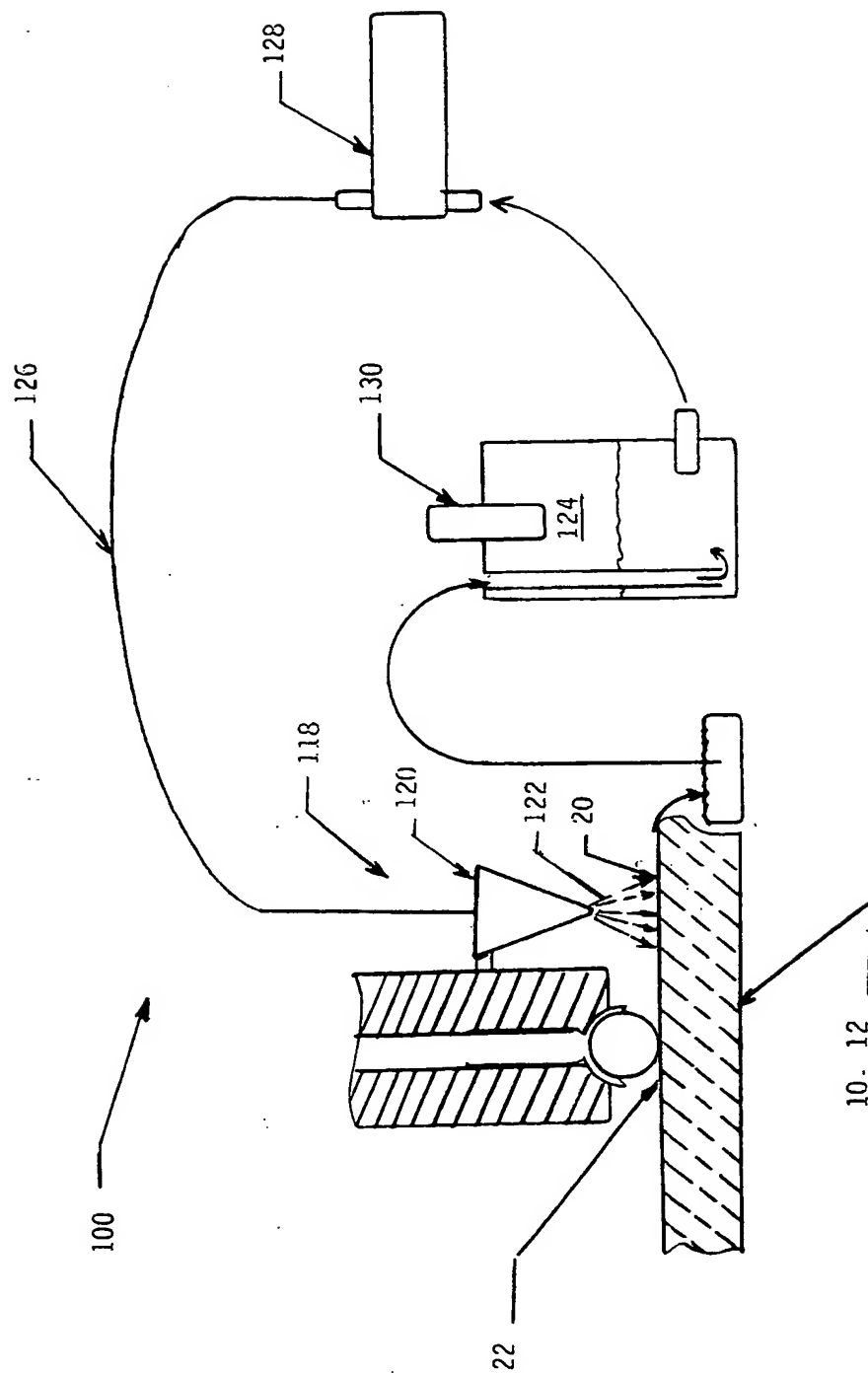
FIG. 5



Surface tensile stress developed by cooling the surface plotted as a function of the temperature differential achieved between the surface and interior.

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FIG. 6



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FIG. 8

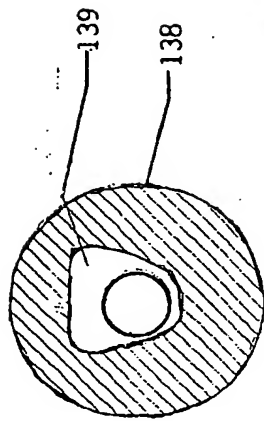
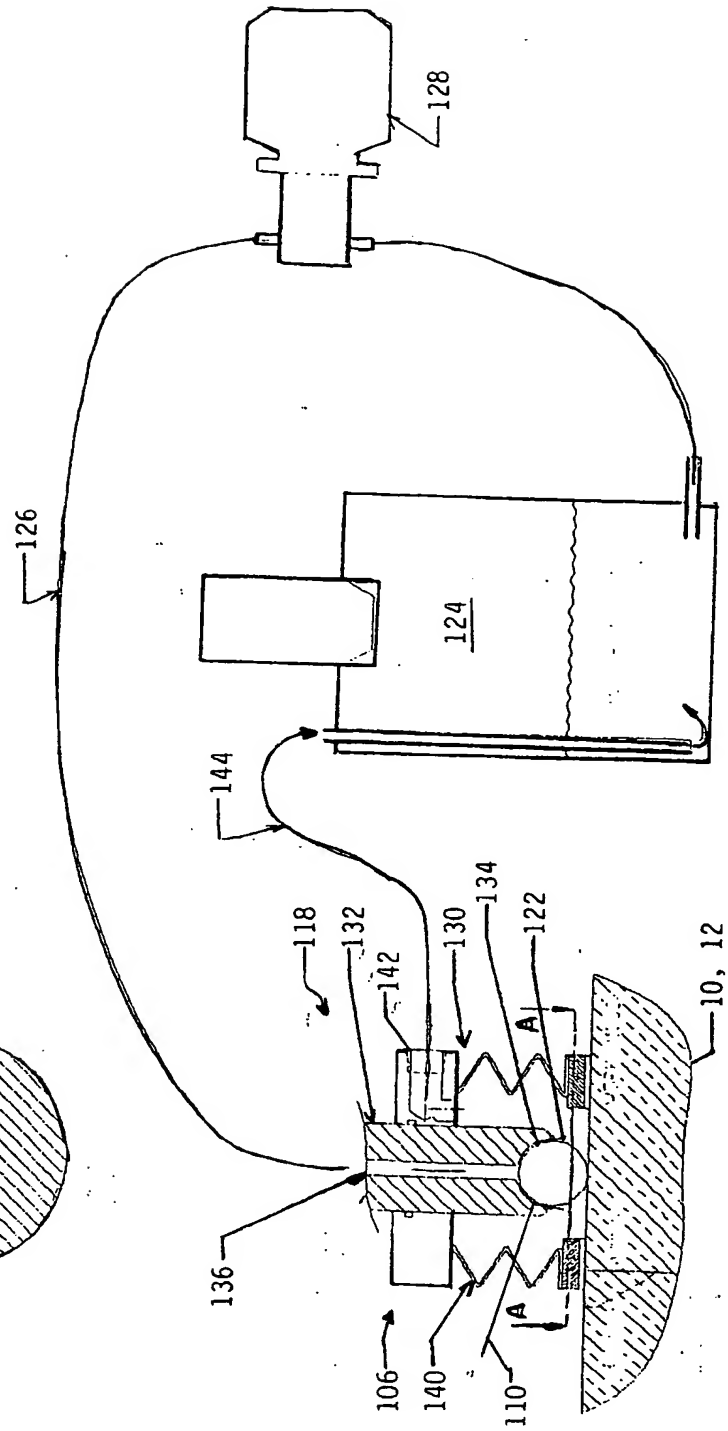


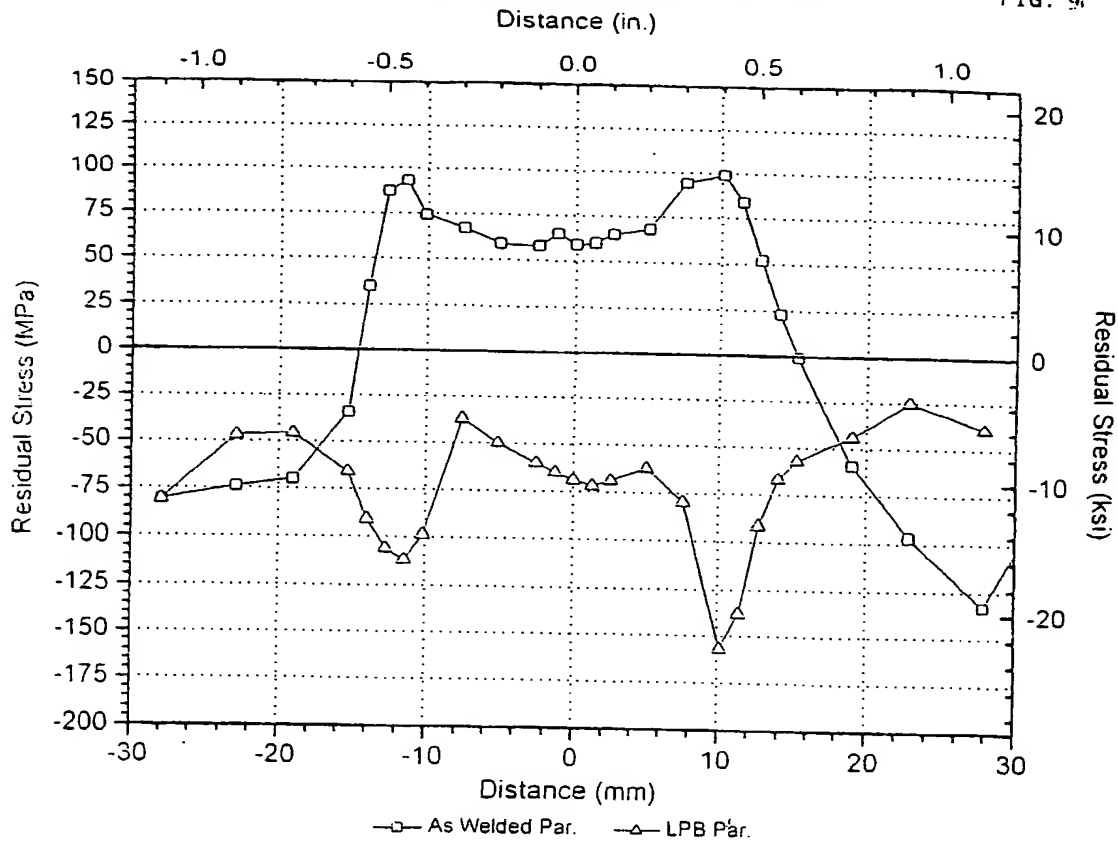
FIG. 7



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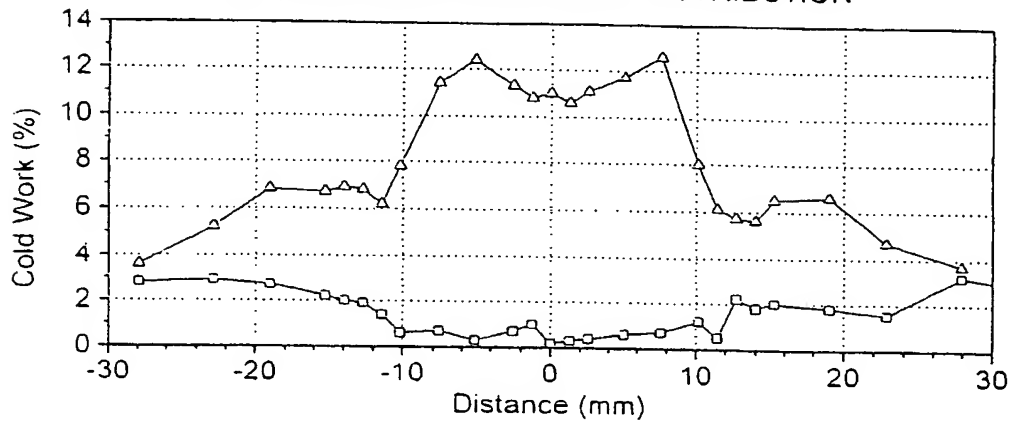
SURFACE RESIDUAL STRESS DISTRIBUTION

FIG. 9.



(311) AVERAGE COLD WORK DISTRIBUTION

FIG. 10



2024-T351 ALUMINUM FRICTION STIR WELDMENT
Weld Side Surface